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(54) Title: FLUORINATED POLYMERS USEFUL AS PHOTORESISTS, AND PROCESSES FOR MICROLITHOGRAPHY

(57) **Abstract:** This invention provides a fluorine-containing copolymer having a repeat unit derived from at least one fluorinated olefin and a repeat unit derived from at least one polycyclic ethylenically unsaturated monomer having pendant hydroxyl or esterified hydroxyl groups, and optionally other repeat units, typically derived from an acrylate. These polymers have high transparency at short wavelengths such as 193 nm and 157 nm, and provide good plasma etch resistance and adhesive properties. Also provided are photoresist compositions and substrates coated therewith.

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